AD-761 554

AEROSOL GENERATOR

B. M. Kasatkin, et al

Foreign Technology Division
Wright-Patterson Air Force Base, Ohio

21 May 1973

AD 761 554

FTD-HT-23-416-73

FOREIGN TECHNOLOGY DIVISION

AEROSOL GENERATOR

by

B. M. Kasatkin, N. V. Kasatkina

7

EDITED TRANSLATION

FTD-HT-23-416-73

AEROSOL GENERATOR

By: B. M. Kasatkin, N. V. Kasatkina

English pages: 3

Source: USSR Patent Number 197351, 31 May 1967, pp. 1-2.

Country of origin: USSR

Translated by: SSgt Michael L. Seidel

Requester: FTD/PDTR

Approved for public release; distribution unlimited.

PREPARED BY:

TRANSLATION DIVISION
FOREIGN TECHNOLOGY DIVISION
WP-AFB, OHIO.

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Foreign Technology Division Air Force Systems Command U. S. Air Force	2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED 2b. GROUP

3. REPORT TITLE

AEROSOL GENERATOR

4. DESCRIPTIVE NOTES *(Type of report and inclusive dates)*

Translation

5. AUTHOR(S) *(First name, middle initial, last name)*

B. M. Kasatkin, N. V. Kasatkina

6. REPORT DATE 31 May 1967	7a. TOTAL NO. OF PAGES 2 17	7b. NO. OF REFS
8a. CONTRACT OR GRANT NO. b. PROJECT NO JDX3 c. d	9a. ORIGINATOR'S REPORT NUMBER(S) FTD-HT-23-416-73 9b. OTHER REPORT NO(S) *(Any other numbers that may be assigned this report)*	

10. DISTRIBUTION STATEMENT

Approved for public release; distribution unlimited.

11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY Foreign Technology Division Wright-Patterson AFB, Ohio

13. ABSTRACT

10

DD FORM 1 NOV 65 1473

11

UNCLASSIFIED

Security Classification

U. S. BOARD ON GEOGRAPHIC NAMES TRANSLITERATION SYSTEM

Block	Italic	Transliteration	Block	Italic	Transliteration
А а	*А а*	A, a	Р р	*Р р*	R, r
Б б	*Б б*	B, b	С с	*С с*	S, s
В в	*В в*	V, v	Т т	*Т т*	T, t
Г г	*Г г*	G, g	У у	*У у*	U, u
Д д	*Д д*	D, d	Ф ф	*Ф ф*	F, f
Е е	*Е е*	Ye, ye; E, e*	Х х	*Х х*	Kh, kh
Ж ж	*Ж ж*	Zh, zh	Ц ц	*Ц ц*	Ts, ts
З з	*З з*	Z, z	Ч ч	*Ч ч*	Ch, ch
И и	*И и*	I, i	Ш ш	*Ш ш*	Sh, sh
Й й	*Й й*	Y, y	Щ щ	*Щ щ*	Shch, shch
К к	*К к*	K, k	Ъ ъ	*Ъ ъ*	"
Л л	*Л л*	L, l	Ы ы	*Ы ы*	Y, y
М м	*М м*	M, m	Ь ь	*Ь ь*	'
Н н	*Н н*	N, n	Э э	*Э э*	E, e
О о	*О о*	O, o	Ю ю	*Ю ю*	Yu, yu
П п	*П п*	P, p	Я я	*Я я*	Ya, ya

* ye initially, after vowels, and after ъ, ь; e elsewhere. When written as ё in Russian, transliterate as yё or ё. The use of diacritical marks is preferred, but such marks may be omitted when expediency dictates.

AEROSOL GENERATOR

B. M. Kasatkin and N. V. Kasatkina

Applicant: The Central Asian Scientific
Research Antipest Institute

The invention pertains to devices for the production of dry aerosol and the treatment of rodent burrows with it.

Existing aerosol generators include a fan with an air duct, a muffled engine a guiding pipe, and a control mechanism.

In the proposed generator for the purpose of dry aerosol production a volatilization chamber is situated in the muffler, and the exhaust piping in the muffler is led into the air duct. The volatilization chamber is made in the form of a cylinder with an airtight end-cap and with an exhaust port into the cavity of the muffler. The cylinder of the engine is placed within the fan's air duct.

The illustration shows a schematic diagram of the aerosol generator.

It consists of frame 1 with the handle 2 for the carrying of the apparatus, fan 3 with air duct 4, the two-stroke piston

engine 5 with muffler 6, volatilization chamber 7 in the form of a cylinder with airtight end-cap 8 and exhaust port 9 into the cavity of the muffler, fuel tank 10, guide fitting 11 hinge-connected with the air duct, drive 12 including a pulley and gear drive, and the gear box 13 with control lever 14. Engine cylinder 15 is located in the fan's air duct. The muffler exhaust pipe is led into fan's air duct.

When the aerosol generator is operating, the engine sets the fan in motion, forcing air into the air duct. At this time insecticide is introduced into the volatilization chamber, and is converted into an aerosol due to the action of the high temperature. The aerosol is picked up by the air flow through the outlet from the muffler exhaust pipe and directed into the burrow of the rodent.

Object of the Invention

1. The aerosol generator, including a fan with an air duct, an engine with a muffler, a guide pipe and a drive mechanism, *is distinguished* by the fact that in order to form a dry aerosol there is a volatilization chamber located in the muffler, and the muffler exhaust pipe leads into the air duct.

2. The generator in p. 1 *is distinguished* in that the volatilization chamber is made in the form of a cylinder with an airtight end-cap and with an exhaust port to the cavity of the muffler.

3. The generator in p. 1 *is distinguished* in that the engine cylinder is located within the air duct of the fan.